1. Record Nr. UNINA9910462428603321

Titolo	Handbook of lubrication and tribology / / edited by George E. Totten
Pubbl/distr/stampa	Boca Raton, Fla. : , : CRC Press, , 2006-
ISBN	0-429-13737-0 1-4200-6909-8
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (1139 p.)
Altri autori (Persone)	TottenGeorge E
Disciplina	621.89
Soggetti	Lubrication and lubricants Tribology Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Rev. ed. of: CRC handbook of lubrication. c1983-c1994.
Nota di contenuto	Front Cover; Contents; Preface; Advisory Committee; Review Board; Contributors; Chapter 1 - Tribology; Chapter 2 - Surface Analysis; Chapter 3 - Roughness; Chapter 4 - Contact Mechanics; Chapter 5 - Friction; Chapter 6 - Wear: A Synoptic View; Chapter 7 - Adhesive Wear; Chapter 8 - Abrasive Wear; Chapter 9 - Rolling Contact Fatigue Wear; Chapter 10 - Fretting; Chapter 11 - Erosion; Chapter 12 - Oxidative Wear; Chapter 13 - Wear Models; Chapter 14 - Lubrication; Chapter 15 - Hydrostatic Lubrication; Chapter 16 - Hydrodynamic Lubrication; Chapter 17 - Compressible Gas Film Lubrication Chapter 18 - Elastohydrodynamic LubricationChapter 19 - Mixed Lubrication; Chapter 20 - Boundary Lubrication and Boundary Lubricating Films; Chapter 21 - Additive Technology; Chapter 22 - Lubricants; Chapter 23 - Incompressible Fluids; Chapter 24 - Base Oils; Chapter 25 - Additives for Lubricants; Chapter 26 - Rheology; Chapter 27 - Lubricant Application; Chapter 28 - Lubricating Grease; Chapter 29 - Solid Lubricants; Chapter 30 - Metalworking Lubricants; Chapter 31 - Hydraulic Fluids; Chapter 32 - Fluid Maintenance; Chapter 33 - Wear Materials Chapter 34 - Friction and Wear of Polymer MaterialsChapter 35 - Metals; Chapter 36 - Wear and Lubrication of Ceramics; Chapter 37 - Composite Materials; Chapter 38 - Coatings and Surface Treatments;

Chapter 39 - Low Friction Coatings; Chapter 40 - Wear Coating and Treatments; Chapter 41 - Coatings and Surface Treatments: Interactions with Lubricants; Chapter 42 - Design for Lubrication and Tribology; Chapter 43 - Fluid Film (Hydrodynamic) Lubrication; Chapter 44 - Journal Bearings; Chapter 45 - Thrust Bearings; Chapter 46 - Hydrodynamic Step and Wedge Bearings
Chapter 47 - Compliant Foil Bearing Technology: An OverviewChapter 48 - Components with Nonconforming Contacts; Chapter 49 - Lubrication of Rolling Element Bearings; Chapter 50 - Gear Lubrication; Chapter 51 - Cams; Chapter 52 - Lubrication Oil Systems; Chapter 53 - Surface Texturing; Chapter 54 - Sliding Bearings; Chapter 55 - Magnetic Bearings; Chapter 56 - Face Seals; Chapter 57 - Lip Seals; Chapter 58 - Brake and Clutch*; Chapter 59 - Automotive Tribology; Chapter 60 - Turbomachinery Tribology; Chapter 61 - Natural and Artificial Human Joints
Chapter 62 - Nuclear Reactor Power Station LubricationChapter 63 - Space Mechanism Lubrication; Chapter 64 - Magnetic Storage; Chapter 65 - Diagnostics; Chapter 66 - Tribology Testing; Back Cover

Sommario/riassunto

Since the publication of the best-selling first edition, the growing price and environmental cost of energy have increased the significance of tribology. Handbook of Lubrication and Tribology, Volume II: Theory and Design, Second Edition demonstrates how the principles of tribology can address cost savings, energy conservation, and environmental protection. This second edition provides a thorough treatment of established knowledge and practices, along with detailed references for further study.Written by the foremost experts in the field, the book is divided i